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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/052,919	11/02/2001	Michael G. Hollars	020910-000410US	9751

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EXAMINER

MARSCHEL, ARDIN H

ART UNIT

PAPER NUMBER

1631

DATE MAILED: 09/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/052,919

Applicant(s)

HOLLARS ET AL.

Examiner

Ardin Marschel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) *enclosed (2 sheets)*
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

TITLE

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed. The title cites the validation method of the invention as being directed to "self-validation". In contrast there is no "self" validation cited in the claimed invention. The computer modeling of the claims is described as separate from the validation steps.

NON-STATUTORY SUBJECT MATTER

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-8 and 10-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Consideration of the "Computer-Related Inventions" section 2106 of the MPEP, part B, subpart 2.(b), has revealed that the instant claims are directed to non-statutory subject matter. The instant claims are directed to computer implemented methods of validation without requiring the performance of a result outside of the computer and thus manipulates concepts or converts data without resulting in any physical transformation outside of the computer. It is noted that instant claim 9 requires the actual physical synthesis of a compound and thus is not included in the list of instant claims which are rejected over this issue. It is also noted that testing is cited in the last 2 lines of instant claim 1, for example, but is not worded so as to be directed to physical testing per se.

PRIOR ART

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 5, 7, 9, 10, 16-18, and 20 are rejected under 35 U.S.C. 102(e)(2) as being clearly anticipated by Sardashti et al. (P/N 6,208,137).

Sardashti et al. summarizes the invention therein in the abstract as being directed to predicting properties of polymers wherein training sets and predictive data are utilized. Figure 1 of the reference depicts a method of simulating a molecular system via a property data set by computer modeling (instant claim 1, lines 5-6). Thus, model parameters are selected as required in instant claim 1, line 3. Various parameters are analyzed and the training set is validated both internally and externally. The validation is more detailed in column 5, line 52, through column 6, line 40. Model parameters; set forth as property data sets (instant claim 1, line 4); are selected for validation and compared between predicted and measured values (instant claim 1, lines 7-8). The validity of the model is described as being checked in column 6, lines 38-40, which is reasonably interpreted as the type of testing as instantly claimed in the last 2 lines of instant claim 1. Column 5, line 52, through column 6, line 40, also evaluate the concentrations of polymers, such as xylene soluble polypropylene as a group of atoms

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as in instant claim 5 and with the polypropylene shape as an option in instant claim 7. Compound synthesis for measurement and modeling is disclosed in column 3, lines 41-60, as required in instant claim 9. New prediction models are generated from redeterminations and revalidation as disclosed in column 6, lines 34-38, as also required in instant claims 10, 16, and 20. Discrete as well as continuous varying of parameters is set forth in the reference in plotting as in column 6, lines 31-38, as also cited in instant claims 17 and 18. Thus, the instant invention is anticipated.

Claims 1-3, 5-9, and 20 are rejected under 35 U.S.C. 102(b) and (e)(2) as being clearly anticipated by Lee et al. (P/N 5,241,470).

Lee et al. Sets forth a method for determining packing conformation of proteins in the abstract using steric interaction potential, rotations about bonds, and low energy conformations in a simulation method. Columns 7-23 of the reference detail such modeling methods as directed to selected parameters of a protein as summarized, for example, in the abstract as noted above including developing various modeled results for comparison. Various testing methods are also summarized in section XIV in column 23 of proteins or peptides as analyzed in the reference. Validation parameters are selected, predicted, evaluated, tested, etc. in an example wherein column 25, line 33, through column 26, line 55. Deviations from measured crystal structures (synthesized compounds) are evaluated therein specifically to validate the accuracy of the modeling of the protein molecular parameters. These disclosures anticipate the validation methods as instantly claimed including above listed instant claims directed to parameters such as bond rotation etc.

INFORMALITIES

The disclosure is objected to because of the following informalities:

On page 4 of the specification several blanks need to be filled in.

Appropriate correction is required.

No claim is allowed.

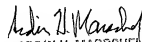
Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center located in Crystal Mall 1. The faxing of such papers must conform with the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993)(See 37 CFR § 1.6(d)). The CM1 Fax Center number is either (703)308-4242 or (703)305-3014.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ardin Marschel, Ph.D., whose telephone number is (703)308-3894. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (703)308-4028.

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instrument Examiner, Tina Plunkett, whose telephone number is (703)305-3524 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

September 5, 2003


ARDIN H. MARSCHEL
PRIMARY EXAMINER